

ABSTRACT OF THE DISCLOSURE

A method and apparatus for initiating a combustive reaction in a slurry fuel. A transfer device optically interconnects an optical energy source with a combustion chamber containing slurry fuel and air. The optical energy source generates an output for interacting with the slurry fuel and air mixture to create a combustive reaction. In a first preferred embodiment, the optical energy source generates an excitation pulse having a high power leading edge and low power trailing edge. In a second preferred embodiment the optical energy source generates a first and second excitation pulse, the first excitation pulse having higher power than the second excitation pulse.